Workshop Outcomes

1. Identified key elements of your campus culture that influence choice of an assessment management system (AMS) or fit of existing solution.

2. Discussed key steps in selecting and implementing a system in light of own institutional organization.

3. Answered your questions related to AMS.

What do AMS do?

...assist in the organization, archiving, and reporting of the data collected during the assessment process
-R. S. Richarde, undated

...provide the tools to facilitate and coordinate the underlying tasks that contribute to the assessment process and to the collaborative discussion focused on ways to improve student learning
-P Maki, 2010

ALA Survey Results: Most Important Reason & Hope to Accomplish

- Streamline reporting and Data Depository
- Promote more engagement and sustainability in assessment
- Organize data for internal and external audiences
- Assessment Office N+1: Increase efficiency & effectiveness
- Make it easier for faculty to use assessment data
- Stop our searching through emails & attachments....

AMS Examples

<table>
<thead>
<tr>
<th>Commercial</th>
<th>Home Grown</th>
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<tr>
<td>Blackboard Outcomes</td>
<td>PEARL: University of Nebraska - Lincoln</td>
</tr>
<tr>
<td>Chalk &amp; Wire</td>
<td>PRISM: Colorado State University</td>
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<tr>
<td>CurricUNET</td>
<td>OATS: Georgia Institute of Technology</td>
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<td>DigiCat</td>
<td>Others?</td>
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<tr>
<td>eLumen</td>
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<td>LiveText</td>
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<td>Nuventive - TracDat</td>
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<tr>
<td>StudentVoice</td>
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<td>TaskStream</td>
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<td>TK20</td>
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<td>WEAVE Online</td>
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**ALA Survey Results cont...**

What 2-3 things do you hope to take away from our discussion of AMS?
- How to identify campus needs and whether AMS can fulfill the needs
- Is it worth the money?
- What process should be used to adopt an AMS?
- What is the implementation process like?
- How do you engage techno-phobic faculty?
- E-portfolio vs. AMS
- My fav...I know nothing so have no expectations.

---

**ALA Survey Results**

What 2-3 things do you hope to take away from our discussion of AMS?
- How to integrate LMS and AMS
- What are the MUST HAVEs, WANTs, and BONUS components
- Which is the best?
- See what an AMS looks like
- How does it work and how does it make it easier?

---

**Table Talk**

What do you want these systems to do?
What do you see as their functionalities?

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**Assessment Process: The Foundation**

Based on Gross & Nord, 2007

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**Schools are shaped by what they buy.**


---

**Research suggests that successful adoption depends more on campus culture and politics than on software functionality.**

McCann, 2010, and references therein
#### A Quick Glance at an AMS

- Sandbox version of an actual AMS – Nuventive’s TracDat
  
  sandbox4.tracdat.com

- Overview of program and higher level assessment planning and management functions

#### Case Study 1: Institutional Context for Assessment Management

- Distributed Campus System with Online and Blended Programs
  
  - Distributed campus system & delivery model options
  - Course embedded assessment & rubrics
  - Some full-time faculty and many adjunct instructors
  - Professional and regional accreditation

#### Case Study 1: Institutional Assessment Processes & Practices...pre-AMS

- Paper Bound and Collection Challenged
  
  - Each degree assessment plan, curriculum map, and assessment tools using basic template...lived in binders
  - Methodology relied on biased sampling
  - Re-graded papers and/or used existing data (e.g. comp exams) loosely connected to courses
  - Missing FT faculty engagement across depts. & adjunct faculty engagement in assessment

#### Case Study 1: Institutional Culture...pre-AMS

- University leadership expects each program will be assessed

- It is OK if only a few (or one) faculty members take the lead

- Choosing existing assessment tools is a good idea

- Purpose of assessment is to improve programs

- Assessment not shared outside of department or school

#### Case Study 1: Timing....Why Now?

- Brandman University became a separate entity of the Chapman University system

- 2009-2010: All courses revised to a blended format

- 2009-2010: Synchronization of course revisions with revision of PLOs using Bloom’s Digital Taxonomy

- Adoption of course embedded assessment

- Old system clearly not working...Air of change and innovation throughout university
**Case Study 1: Initial Priorities**

- Data collection must be do-able for course embedded assessment
- Ease of use for faculty and students
- Data disaggregated by delivery method, location, and student characteristics
- Report generation to reflect audience needs.

**Case Study 2: Institutional Context for Assessment Management**

- Public brick and mortar with face-to-face instruction
  - Assessment processes vary among programs and evolving
  - Manage, track, share, connect and align assessment with institutional goals across the entire campus
    - Academic Affairs
    - Student Affairs
    - Administrative Division
  - No specialized accreditation programs (ex. NCATE) requiring demonstrate outcomes for individual students

**Case Study 2: Institutional Culture**

- As a matter of academic and administrative policy, all programs and units are expected to assess at least one learning or service outcome annually
- Goal is ‘actionable’ information that supports institutional goals and is acted upon to improve outcomes
- Vocabularies and practices differ across divisions, although outcomes-based

**Case Study 2: Institutional Assessment Practices and Processes**

- Many documents to track and archive with concerns about unreliable institutional memory
  - Large and growing numbers of annual reports to track
  - Potential for multiple instances of documents
  - Ensuring assessment plans and reports are not lost with changes in personnel

- Common templates but valuable information hidden within individual documents (ex. PDF, Word)
  - Program and unit assessment practices evolving through targeted feedback and support
  - Sharing of information and practices limited by reporting format & cumbersome summary processes
  - Reinforces silos & retards organizational learning
Case Study 2: Timing...Why Now?

• Institutional culture increasingly established - faculty and staff are familiar with annual assessment cycle so better prepared to take this step
• Need to better share and archive information identified as institutional next step in accreditation self-study
• Dissemination of findings is limited; limiting ability of individuals and units act in response to findings
• Anticipate simplify reporting

Case Study 2: Initial Priorities for AMS

• Facilitate assessment from program or unit level up across institution
• Data input by faculty or staff at program level
• Support sharing, reporting, tracking, archiving, and aggregation of assessment activities, findings, actions
• Potential to extend system to conduct course embedded assessment or, for example, e-portfolios

Reflect & Share: Describe Institutional Context and Priorities for Assessment

1. Individual reflection: Briefly respond to questions 1-5 in Section 1 of the workshop worksheet. (5 mins)
2. Pair and share: Discuss your response to question 5 with a colleague and identify any questions for follow-up discussion.
3. Share with the room: Any key insights to share?

Steps for Achieving AMS Goals

1. Build engagement and institutional infrastructure to select a system
2. Establish goals and metrics for successful adoption
3. Develop and implement a selection process, including identification of key functionalities and product vetting
4. Plan for implementation and sustainability
Building Engagement

Quick Brainstorm:

- Do you anticipate any challenges to adopting an AMS at your institution? Who might resist and why?

Case Study 1: Building Engagement at the Distributed Campus

- Faculty for data collection & report generation – representatives across schools
- IT commitment & resources
- Administration: $5 for new support staff and software
- University Leadership: Faculty, Deans, President
- Committee comprised from these 4 areas

Case Study 2: Building Engagement at the Public Brick and Mortar

- Assessment evolving – develop awareness of institutional level workflow & related needs
- Different perspectives on need
- Strong faculty governance
- Fiscal environment

Case Study 2: Building Engagement at the Public Brick and Mortar

Actions...

- Into Accreditation report as sustainability action item to be identified and implemented by institutional assessment committee
- Ongoing efforts to institutionalize assessment so that AMS is seen as needed and useful

Challenges to Engagement from Literature (McCann, 2010)

Faculty feel

- AMS work not relevant to teaching
- AMS work not valued like other aspects of job (ex. research)
- Not responsible for department, college, or campus assessment efforts
- Too busy
- Something new to learn – frustrating, time consuming
- AMS not necessary- already doing good job with assessment

Ideas for Building Engagement from Literature (McCann, 2010)

- Work with leadership to institutionalize assessment
- Build and communicate a vision for what the system is intended to achieve
- Monitor and publicize achievement of that vision, including results and impact from users' perspectives
- Ensure resourced to provide support to faculty and staff for implementation
Reflect & Share: Building Engagement

1. At your table, discuss the following questions. (5 min)
   - Do you anticipate any challenges to adopting an AMS at your institution? Who and why?
   - What are some ideas for responding to these challenges?

2. Share key insights with room. (5 min)

Steps for Achieving AMS Goals

- Build engagement and institutional infrastructure to select a system
- Establish vision and metrics for successful adoption
- Develop and implement a selection process, including identification of key functionalities and product vetting
- Plan for implementation and sustainability

Next Step: Establish Vision & Metrics for Success

- Important step for project success (McCann, 2010)
- Also see McCann (2010) and references therein

Case Study 1: Establish Vision & Metrics for Success

- AMS will:
  - utilize rubric data for signature assignments embedded in courses
  - integrate with the student information system
  - provide data reports of PLOs
  - enable sharing with stakeholders
  - enable faculty to focus on analysis and meaning of outcomes

Case Study 2: Establish Vision & Metrics for Success

- High, annual use rates by faculty and staff
- Faculty and staff user satisfaction
- Self-reported reductions in assessment-related workload
- Evidence of sharing and coordinating across programs
- Increased awareness of assessment findings on campus
- Increased use of findings by campus constituents
- Increased application of findings in program and institutional planning and budgeting processes

Establish Vision & Metrics for Success: Questions for Reflection

1. What do you hope to achieve through an AMS? How will your campus judge if the solution is a success?
2. What will your institution use as metrics of success?
Steps for Achieving AMS Goals

- Build engagement and institutional infrastructure to select a system
- Establish goals and metrics for successful adoption

Potential Steps in a Selection Process

- Establish a committee
- Establish the timeline
- Identify selection criteria
- Establish a vetting process
- Develop recommendation

Group Brainstorm

Who would you include on your selection committee? Why?

Potential Steps in a Selection Process

- Establish a committee
- Establish the timeline
- Identify selection criteria
- Establish a vetting process
- Develop recommendation

Case Study 1: Identifying Selection Criteria at the Distributed Campus

High Priorities

- Integration with LMS & Student Data System
- Rubric building
- Report generation with customized options
- Survey tool
- Institutional portfolio

Case Study 2: Identifying Selection Criteria at the Public Brick and Mortar

High priorities:

- Facilitate existing assessment workflows across institution – annual and periodic (program review)
- Enable reporting, sharing, aggregating, and archiving assessment methods, findings and actions across the institution
- Customizable to meet needs of all institutional divisions
- Broadly user friendly
- Enable feedback on assessment methods
- Integrate and complement extant IT applications – CMS, ODS, Banner, course evaluations, etc.
Reflect & Share: Identifying Selection Criteria

1. Pair and Share: With a partner discuss the following question. (5 minutes)
   - What are some functions or high priority needs that AMS should address at your institution? What do you need it to do?

2. Share key insights with room. (5 minutes)

Potential Steps in a Selection Process

- Establish a committee
- Establish the timeline
- Identify selection criteria
  - Establish a vetting process
  - Develop recommendation

Considerations in the Vetting Process

- Interview current institutional users of solutions
- Invite vendors to campus
- Provide a “script”
- Provide with campus examples to input into system
- Solicit feedback from demo participants

Considerations in the Vetting Process

- If considering a solution that involves more than software application, inquire about how connected
  - Ask to “sandbox” an application, and follow-up with questions

Steps for Achieving AMS Goals

- Build engagement and institutional infrastructure to select a system
- Establish goals and metrics for successful adoption
- Develop and implement a selection process, including identification of key functionalities and product vetting
  - Plan for implementation and sustainability

Implementation & Sustainability

- Pilot Approach vs. Full Implementation:
  - One AMS established four pilots (one in each school)
  - Other AMS full implementation in 3-months in one schools
  - Ensure adequate staff resources to implement successfully/meet intended implementation metrics
Implementation & Sustainability

- Timeline for project outcomes and assigned responsibility
- IT is critical
- Training and Support – timeline x 2
- Provide users with support when ready to use system
- Monitor for impact and share successes (McCann, 2010)
- Communicate the degree to which vision is being achieved, with examples of successful implementation (McCann, 2010)
- Simultaneously take steps to support institutional culture change to institutionalize assessment (McCann, 2010)

Appendix I

Additional AMS Examples

A Department’s Public TaskStream Site

- Department of Chemistry at CSU Bakersfield uses TaskStream
  
  http://www.csub.edu/chemistry/

- Department’s annual assessment plans are publicly available via TaskStream website

University of Nebraska, Lincoln:

PEARL System

- Documents peer review process for developing assessment practices

  http://www.unl.edu/ous/pearl/cycle.shtml
AMS Workshop Reflections Worksheet

Assessment Management Systems/Solutions...

.....provide the tools to facilitate and coordinate the underlying tasks that contribute to the assessment process and to the collaborative discussion focused on ways to improve student learning

- Peggy L. Maki, 2010

Section I: Establishing Institutional Context for Adopting an AMS

1) Describe the institutional context for assessment, specifically the essential attributes of your institution or school that influence assessment management practices and needs.¹

2) Briefly, but with a critical eye, describe your institution’s assessment processes and reporting practices, particularly as they relate to managing/facilitating assessment including use and sharing of findings.²

3) Briefly describe your institution’s assessment-related culture, including its degree of development.³

¹ I.e. single or multi-campus institution; assessment taking place in academic, student affairs, etc.; face-to-face, blended, or fully online learning; faculty composition, full time, part time, etc.; types of accreditation to support, regional and specialized.
² Who does assessment (who doesn’t?)? How is it done (course embedded, assessment of archived work by a faculty subcommittee, etc.)? How are findings, etc. reported and shared? How are results archived for future use? ³ Are faculty and staff reasonably experienced with assessment or is it a new endeavor? What is the purpose of assessment; for example, is it compliance or improvement oriented? Is assessment expected? Required? Is assessment understood and valued by faculty and staff; is it seen as an add-on done for others or a core function linked to program and institutional planning and decision making?

4) Consider the issue of timing: Why are you considering or investigating an assessment management solution now?

5) Consider your answers to the previous questions: If your school or institution were to pursue an assessment management solution right now, what might be some critical priorities? Briefly why?

Section II: Building Engagement for Adopting an AMS

6) Do you anticipate challenges to adopting an AMS exist at your institution? Who might resist and why?

7) What are some ideas for addressing those challenges?

Section III: Establishing Vision & Metrics

8) What do you hope to achieve through an AMS? How will your campus judge if the solution is a success?

9) What might your institution use as metrics of success?
Section IV. Selection Committee Membership

10) By what process(es) will the AMS be selected at your institution? What existing processes might be involved in rendering this type of decision (e.g. faculty approval, dean approval, administrative approval)?

11) Who would you include on your selection committee? Why?

Section V: Identifying Selection Criteria and Key Functionalities

12) What are some functions or high priority needs that the AMS should address on your campus? That is, what do you need it to do?

Section VI: Considerations in Vetting Process

13) Notes and thoughts about vetting process.

Section VII: Implementation and Sustainability

14) Notes and thoughts about implementing and sustaining the system.
Commercial Assessment Management Systems

Please find below the names and URLs of some commonly used commercial assessment management systems. The list is not comprehensive, as the market continually changes. For vendors offering multiple products, we have tried to help orient you by providing descriptions of the products based on the vendor website. Beyond the vendor websites, helpful descriptions of many of these systems are available in Appendix 8.2 of Peggy Maki’s book Assessing for Learning: Building a Sustainable Commitment Across the Institution. (2nd Ed. Sterling: Stylus, 2010. Print.) Oakleaf et al. 2013 (see references in this packet) also provides an alignment of system and functionality for a subset of these systems.

Note: Vendors with an asterisk (*) indicate that the system is primarily a learning management system serving as a platform for course delivery with optional assessment features. Vendors without an asterisk represent systems that are primarily assessment management systems and not for course delivery.

Agilix BrainHoney*: http://brainhoney.agilix.com/ Agilix BrainHoney LMS is a shareable content object reference model (SCORM) and IMS-compliant Web-based solution that offers blended and online learning, standards alignment and reporting, and mastery-based differentiated instruction. BrainHoney LMS is hosted in the cloud, so schools and districts are relieved of hardware considerations. BrainHoney LMS is built on the BrainHoney platform, a modular learning infrastructure that offers digital content including online courses, videos and assessments, either for a fee or as open resources.

In addition to core capabilities provided by LMS solutions, some highlights of this solution are:
- Curriculum mapping and reporting: The BrainHoney drag-and-drop curriculum mapping and reporting allows schools and districts to quickly and easily assure courses will support teaching objectives.
- State learning standards and objectives: State learning standards and objectives can be imported and assigned to course content to ensure instruction, assignments and assessments are aligned with institutional goals.
- Dynamic assessment generation: Users can dynamically generate assessments by selecting a defined number of questions by objective, question type or category, allowing each student to take a different version of the test.
- WYSIWYG course authoring: Wizards provide step-by-step instructions for creating new courses, section and assessments.
- Personalized lesson plans: Formative and remediative assessments allow instructors to create completely individualized courses to cover the objectives not yet mastered by the student.

Axiom Education*: http://www.axiomeducation.us/ Axiom Education provides a solution for educational institutions, both higher education and K-12, to effectively manage assessment of student learning outcomes. This solution is provided as a web-based service called Mentor and combines either course management and assessment or portfolios and assessment to achieve assessment at the point of learning. It effectively manages the assessment of student learning outcomes with a totally integrated solution that includes components for Course Management (CMS) with Assessment, Reflective Portfolios with Assessment, Institutional Review Board (IRB) Protocol Management, Grants Management, Faculty Activity Reporting, Application/Peer Review Manager, Internships and Student Course Evaluation. These components are available as a total package that will support the entire institution or as individual parts to support singular instructors.

Supports Institutional Assessment
- Supports multiple sets of program outcomes, rubrics and methods of assessment
- Management of accreditation documentation and integrated Faculty Activity Reporting system
- Full Integration with existing Student Information Systems

Helps Educators Manage Courses

Laura. E. Martin, Ph.D. and Laurie G. Dodge, Ph.D.  Presentation 2013
Flexible CMS can be tailored to individual instructor needs
- Full site of electronic communication tools including discussion boards, internal messaging, chat, class and group email
- Electronic posting of assignments and submission and archiving of student work with secure yet easy access to student files
- Full online testing system and discussion boards
- Fully integrated electronic grade book, include the option for outcomes based report cards
- Repository for class texts and downloadable electronic files

Facilitates Student Learning
- Easy to use CMS accessible through any web browser
- Class texts always available online
- Assignment, quiz and test grades always available

Blackboard: [http://www.blackboard.com/Platforms/Learn/Products/Blackboard-Learn/Assessment-Accreditation-Analytics.aspx](http://www.blackboard.com/Platforms/Learn/Products/Blackboard-Learn/Assessment-Accreditation-Analytics.aspx). Blackboard provides two solutions for data-driven decision-making that help build a better education experience: Blackboard Learn™ for Outcomes Assessment and Blackboard Analytics™. Blackboard Learn for Outcomes Assessment is a comprehensive solution that is tightly integrated with your Blackboard course management system to make assessment faster and easier. Blackboard Analytics is a packaged data warehouse and analytics reporting platform designed specifically for colleges and universities to measure an institution’s strategic metrics including dashboards, KPIs and analytics.

Campus Labs: [http://www.campuslabs.com/about-us/](http://www.campuslabs.com/about-us/) Campus Labs is the only specialized, comprehensive assessment program that combines data collection, reporting, organization, and campus-wide integration.

- Compliance Assist is a fully integrated and comprehensive online solution for managing institutional research, planning, and accreditation needs. Our consultants understand the inner workings of a collegiate environment and provide you with innovative web solutions to organize and present planning, assessment, and accreditation reports.
- Campus Labs Baseline allows campuses to measure learning, document student involvement, and inform strategic directions. Through sophisticated assessment and reporting tools, divisions and departments can collect direct and indirect measures of learning, benchmark with peers, and use assessment results to improve programs and services.
- Campus Labs Beacon is a web-based solution focusing on six factors that are the strongest predictors of student retention and persistence, asking students questions about everything from their social skills and confidence levels to their attitude toward learning. By measuring cognitive ability as well as non-cognitive skills, Beacon is able to classify each student, produce reports for students and advisors, and recommend campus-wide resources for at-risk students.
- The Campus Labs course evaluation platform provides faculty and administrators with advanced evaluation tools and reporting capabilities to easily integrate course evaluation data into program planning, decision-making, and administrative review processes.

Canvas by Instructure: [http://www.instructure.com/higher-education](http://www.instructure.com/higher-education) Canvas adapts to both how you prefer to work and the tools you work with. It provides easy-to-use, complementary tools that make course management a breeze. Whether it’s Canvas’ SpeedGrader, mobile apps or flexible communication tools, you’re going to save all sorts of time and effort. Graphic Analytics Reporting Engine: With dashboard views customized for students, teachers and administrators, Canvas Analytics take course data to a whole new level. Analytics give students continuous feedback and allow teachers to measure effectiveness of content, view learning outcomes and intervene when students need extra help. And with side-by-side comparisons of courses and departments, administrators have a bird’s eye view of the whole institution. Outcomes: Integrated learning outcomes reduce the effort and expense of accreditation. Outcomes connect coursework with
competencies defined at any level of the institution, so assessing student learning has never been easier. And when aligned with rubrics, outcomes help improve teacher feedback—and may even inspire better student performance.

- SpeedGrader: Canvas provides a built-in assignment grader that saves hours of time.
- Rubrics: Easy-to-use rubrics make assignment and grading crystal-clear and promote efficient learning.
- Online testing: Canvas supports creating quizzes from scratch or a bank of questions using a wide variety of question types and quiz options.
- Flexible pedagogy: Canvas supports a variety of teaching styles and new Web technologies.
- Real-time reporting: Schools and districts can monitor course and student activity with real-time reporting.

Chalk & Wire: [http://www.chalkandwire.com/](http://www.chalkandwire.com/) Chalk & Wire’s suite of tools and services gives educators the power to build systems and processes that house authentic learner work samples and assessment-related data sets. Faculty and administrators can gather relevant data and generate meaningful reports with regard to teaching and learning while also facilitating academic and professional growth. Faculty members, assessors and staff can build learning objectives, assignments and assessment instruments tied to any standards desired. While assessing learners’ work, faculty members and assessors can view assessment instruments in a split-screen modality and can easily provide comments based on defined sets of criteria. They can compare past and present performance at a glance. Chalk & Wire’s robust reporting engine was developed with institutional research in mind. As such, it is a content-neutral reporting tool, capable of multiple levels of analysis that address the important questions of any discipline. We like to compare our reporting engine to an Olympic-sized swimming pool. At the shallow end, users can generate descriptive reports, showing, for example, mean, median, standard deviation, and distributions (numeric and graphic) of individual assessments. At the deep end, users can develop more complex reports, such as cor relational and cluster analyses, linear regression, and much more.

CurricUNET: [http://www.curricunet.com/cnet_home/](http://www.curricunet.com/cnet_home/) CurricUNET’s most recent upgrade, CurricUNET Meta, further enhances and streamlines the user experience with advanced, customizable tools that are both highly intuitive and simply functional. The key components of the local implementation of CurricUNET Meta include:

- Integrated course and program/degree processing
- Web entry and edits from a custom dashboard with functional widgets and notification badges
- Automated workflow with real-time status reporting
- Configurable design with “drag and drop” screen elements to facilitate rapid implementation without re-program effort
- Streamlined navigation tools with convenient bread crumb displays
- Standard report templates and ad hoc report writing tools
- Interfaces to other internal and external systems
- Facilitation of catalog production
- Web-based searches of local, state, and international curriculum databases

Desire2Learn*: [http://www.desire2learn.com/products/learning-environment/](http://www.desire2learn.com/products/learning-environment/) The industry’s most user-friendly, intuitive learning environment is also the core of Desire2Learn Learning Suite. Equipped with unparalleled and sophisticated course design capabilities, extensive reporting, assessment and collaboration options, and seamlessly-integrated mobile capabilities, Desire2Learn Learning Environment has the flexibility to support your institution’s unique learning preferences. Embracing formal and informal approaches to learning, Desire2Learn Learning Environment is propelling the e-Learning experience into the future by combining usability, sophistication and accessibility best practices with integrated social and collaborative tools - all in a mobile-ready environment. By offering premium teaching and learning resources and powerful
assessment and analytics capabilities, Desire2Learn Learning Environment is challenging conventional ideas about what a learning environment can and should be.

**Digication:** [http://www.digication.com/highered/assessment](http://www.digication.com/highered/assessment) Digication Assessment Management System (AMS) Our web-based assessment solution for tracking, comparing, and reporting on student progress and performance gives faculty and administrators the tools they need to assess a class, department, or institution based on your standards, goals, or objectives. The Digication AMS integrates tightly with our award winning e-Portfolio system, enabling students to record and showcase learning outcomes within customizable, media friendly templates.
- Integrated E-Portfolios
- Formative Assessment (Written Feedback)
- Summative Assessment (Score by Rubric)
- Flexible Workflows
- Rubric Builder
- Standards/Goals Manager
- Customizable Reporting Package

**EduMetry:** [http://edumetry.com/](http://edumetry.com/) The EduMetry Five-Step Process:

*Step 1: Develop SLOs* - Working with faculty and administrators, EduMetry can assist in the development of Student Learning Outcomes (SLOs) by translating university/college mission and program objectives into measurable student learning outcomes. To ensure alignment, the process is validated by reverse-mapping SLOs to the objectives and the mission statement.

*Step 2: Design Rubrics* - As any researcher knows, data are only as good as the measuring instrument used to generate them. Our RubricShop™ service takes EduMetry’s expertise in rubrics development and works with faculty subject-matter experts to design rubrics for every SLO. This is a critical step in the assessment process as most data problems arise from either the absence of rubrics, or from rubrics that are improperly mapped to SLOs or poorly worded, anchored, etc. RubricShop™ also validates and calibrates rubrics using a pilot-sample data from actual student-learning artifacts.

*Step 3: Generate Student Learning Outcomes Data* - EduMetry provides two standardized methods for scoring student-learning artifacts and generating Student Learning Outcomes (SLO) data. Assuming that your institution can provide samples of past assignments, limited access to current assignments, and the ability to interface with faculty and administrators, EduMetry facilitates the process and generates the SLO data.

*Step 4: Analyze SLO Data* - EduMetry makes data easy to use and understand through a LearningDashboard™ tool. Once SLO data have been captured, EduMetry carries out detailed analyses to uncover statistical patterns. These include cross-sectional analyses across courses or cohorts and longitudinal analyses over time. LearningDashboard™ is a customized interface for faculty and administrators to examine SLO data and from which to draw insights. By drawing on the power of data-analytics, an administrator can use LearningDashboard™ as a basis for improving individual courses or an entire curriculum. In addition, administrators can generate specialized reports to meet the SLO requirements set by state agencies and accreditors or even justify to potential donors how giving to a college or program is in line with the donor’s preferences and priorities.

*Step 5: Recommend Action* - The final step in EduMetry’s assessment-of-learning process is deriving recommendations. We are guided strictly by the findings from analyzing SLO data. As an external provider of assessment services, we bear the added responsibility of producing work that is beyond reproach and that can withstand the harshest of scrutiny. At the same time, for faculty to accept the findings and for administrators
to be able to implement our recommendations, EduMetry’s work must be sound methodologically and analytically, as well as adhere to the standards of rigorous empirical research.

**eLumen**: [http://www.elumen.info/](http://www.elumen.info/) eLumen provides web-based software that makes tracking higher education student outcomes possible. The eLumen transcript summarizes actual student learning and achievements based on rubrics established for courses. Incorporating learning objectives established by the institution, the eLumen system records and reports student strengths and weaknesses. This provides opportunities for instructors and staff to intervene early and specifically when student performance lags.

**Epsilen**: [http://corp.epsilen.com/higher-ed/overview/](http://corp.epsilen.com/higher-ed/overview/) Epsilen’s ePortfolio helps keep students engaged by allowing learners to manage their complete educational profile online – all of which is available to them for life, and at no cost to the individual user. Epsilen’s Assessment Portal enables institutions to measure effectiveness by quantifying student and institutional success in meeting educational outcomes. Epsilen’s Advising solution focuses on student persistence and success by enabling advisors to be alerted to at-risk students, intervene, remediate and offer tracking. Epsilen’s Learning Management System enables institutions to offer online courses coupled with access to content for teaching, learning and research.

**Foliotek**: [http://www.foliotek.com/schools](http://www.foliotek.com/schools) Foliotek’s institutional portfolio enables you to delegate, collect and coordinate information for program accreditation. The portfolio structure creates project space to store all of the review documentation, and each member of your accreditation team can view the project’s progress. We customize the institutional portfolio structure to your accreditation goals. Any type of electronic file can be stored in this structure. Each section is configured for your school to store documentation and reports that demonstrate compliance with specific accrediting body standards. Your school can develop rubrics that represent the standards and level of performance for one or many accrediting bodies. Foliotek is designed to perform assessments on anything stored within it. Assessments can be formative, summative, informal or based on rubrics tied to standards. This type of data input enables Foliotek to generate reports that accurately portray your educational processes. Reports available through Foliotek include standards-based assessment (any standards, custom standards, custom rubrics), assessment reports, data-form reports, student activity reports, instructor activity and interrater reliability, exporting report data, My Reports and archiving reporting results.

**LiveText**: [https://www.livetext.com/overview/](https://www.livetext.com/overview/) LiveText is a leading provider of campus-wide solutions for strategic planning, assessment, and institutional effectiveness. Our customizable and comprehensive web-based solutions allow for seamless integration and data reporting to effectively measure outcomes-based learning goals and institutional objectives for accreditation and continuous improvement.

**Nuventive**: [http://nuventive.com/assessment/] Nuventive’s assessment solutions:

- **TracDat** facilitates the documentation and organization of improvement measures and data, providing a comprehensive role-based view of assessment activities for faculty and staff. Our TracDat Services packages ensure that TracDat is deployed to help you facilitate participation in the assessment process.
- The **TracDat SharePoint Option** (TSO) integrates TracDat with faculty and staff’s work environment within Microsoft SharePoint, making it easy to contribute to assessment in a familiar work environment. TSO Services help you extend the value of your assessment technology by helping you leverage the rich, collaborative environment of SharePoint.
- **iWebfolio** enables the collection of evidence to demonstrate student achievement.
- Nuventive’s **Strategic Services** enhance your assessment process by helping you deploy and maintain continuous improvement strategies.
PASS-PORT: https://www.pass-port.org/ PASS-PORT provides a wealth of featured to facilitate data collection in a variety of venues:

- Standards-Based Electronic Portfolios: Build portfolios from scratch or from templates and them submit them for evaluation or publish them to the web
- Multiple "Artifact" Evidence Types: Files, professional development records, links, and more
- Experimental Learning Records: Document service learning, filed experiences, student learning, or clinicals with associated site and contact demographics and end-of-experience evaluations from all participants.
- Flexible Standards: Measure outcomes, mission statement goals, professional standards and others
- Integrated Reporting Suite: Get your data out in Excel-based spreadsheets that can be disaggregated on any demographic discriminator tracked
- Blackboard Building Block Integration: Make data collection easier by allowing faculty and students to complete PASS-PORT assessments without ever leaving Blackboard using PASSThru-Blackboard

Pearson eCollege (LearningStudio): http://www.pearsonlearningsolutions.com/pearson-learning-studio/why-learning-studio.php Pearson LearningStudio features best-in-class data and analytics and dashboards for insights into student learning. These features include:

- Student Evaluation and Reporting: Simplifies and streamlines accreditation and reporting
- At-Risk Reporting: Alerts educators of at-risk students in a timely manner
- Institutional Reporting: Allows for cross-term and demographic data analysis for continuous improvement of curriculum
- Multiple Workflows: Helps educators efficiently and accurately map grades, standards, and outcomes in real-time
- Retrieval and Access: Stores artifacts and assessments for logical retrieval and access

MyFoundationsLab provides pre-built and customized assessments, personalized learning plans, and activities in reading, writing, and mathematics. MyLabsPlus data supports and drives course redesign and provides triggers for intervention and remediation. Learning Outcome Manager (LOM) provides a central repository for storing, managing, and analyzing an institution's learning outcomes. MyLab and Mastering from Pearson help improve results for students and faculty through customizable and dynamic technologies — driven by data and analytics and supported with premier Pearson content — that effectively engage individual students at each stage of learning. Social Learning drives workflow management around accreditation and quality control. Readypoint provides real-time views into student, class, and program performance based on evidence-based assessments.

rGrade: http://rgrade.com/rgrade/ rGrade is Educational Informatics' comprehensive assessment management system. rGrade supports a broad range of reform initiatives in K-12 and higher education. rGrade helps institutions solve the very complex and data-intensive performance assessment challenges in ways that individual faculty find powerful to their instructional goals:

- Rubric development and alignment to standards and benchmarks
- Digital portfolio assessment
- Standards alignment to curriculum and student performance
- Everyday course grading and assessment
- Curriculum mapping and progress point modeling
- NCATE Unit Assessment Systems
- RISE Professional Evaluation
RXInsider*: [http://academicsuiterx.com/assessment_eportfolio.php](http://academicsuiterx.com/assessment_eportfolio.php) RXpreceptor is a SaaS-based ELMS (Experiential Learning Management System) serving the needs of experiential and externship departments within higher education. RXpreceptor provides communication, accountability, and efficiency tools that save time and money by streamlining department operations and accreditation data collection processes. Supported by attentive and knowledgeable customer service, RXpreceptor allows for detailed student, site and supervisor management. RXpreceptor also provides externship scheduling management, student evaluations, hours tracking, student competency management, as well as student requirements and immunization tracking. RXpreceptor is customizable and scalable to fit within any program's specific needs and budget. RXoutcome represents the next generation in assessment ePortfolio and outcomes software for colleges and universities. Supported by attentive and knowledgeable customer service, RXoutcome allows for detailed student competency documentation, outcomes assessment and curricular gap analysis. In addition, RXoutcome is customizable and scalable to fit within your program's specific assessment needs and budget.

**TaskStream:** [https://www1.taskstream.com/solutions/](https://www1.taskstream.com/solutions/) TaskStream offers two products for higher education institutions, the Accountability Management System (AMS) and the Learning Achievement Tools (LAT). The AMS supports continuous improvement projects and manages accountability processes at a macro level, while the LAT allows educators and students to plan learning activities, assess student performance, and demonstrate achievement of learning outcomes.

**TK20:** [http://www.tk20.com/products.php](http://www.tk20.com/products.php) TK20 offers two products. CampusWide is a comprehensive assessment, planning, and reporting system designed for collecting and managing academic and non-academic departmental assessment activities to create a culture of evidence throughout the campus. Tk20’s HigherEd is a complete assessment and management system for your college of education. It provides full support for Course, Program, and Unit-based Assessments, Electronic Portfolios, Field Experiences and Clinical Practice, Surveys, Field Placement, Student Advisement, Faculty Performance, Document Room, Admissions, Report Generation, and just about every aspect of the functioning of your unit.

**Waypoint Outcomes:** [http://waypointoutcomes.com/](http://waypointoutcomes.com/) Waypoint Outcomes features customizable, interactive criteria-based assessments, aligned with learning outcomes that streamline the feedback and dialog process. The resulting data can be easily aggregated and reported at multiple levels. Integrated with leading LMS platforms like Blackboard, eCollege, and Moodle, Waypoint streamlines and improves the dialog between faculty/mentor and learner on authentic activities.

**WEAVEOnline:** [http://www.weaveonline.com/](http://www.weaveonline.com/) WEAVEonline is a powerful software application that addresses the need to develop and maintain continuous improvement processes for both the academic and administrative structures within an institution of higher education. It guides and provides for the alignment of multiple processes, including assessment, planning, accreditation, budgeting and institutional priorities. Created and supported by an experienced team of assessment and planning professionals, we have the right tool as well as the consulting talent to support all of your planning, assessment and accreditation needs.

**Home Grown**

PEARL – University of Nebraska-Lincoln

PRISM – Colorado State University

OATS – Georgia Institute of Technology
Questions to Guide Development of Criteria for Selecting an AMS

Please find below some questions and considerations to help your campus identify criteria for selecting an assessment management software packages or packages. The goal is to stimulate thinking about the needs of your campus so that your institution’s assessment values and extant, emerging, or aspirational assessment practices drive the software selection process and not the reverse. Ultimately, it is unlikely that a software package will be able to satisfy all criteria or user needs. Trade-offs will be necessary and prioritization essential!

1. What do you need the system to do? Immediately? Longer-term?

   Potential considerations:
   - Scope of institutional use and thus scope of needs. Will the system be used institution wide, including academic affairs, student affairs, and administrative services, or will its use be more narrowly restricted?
   - Reporting needs for institutional planning processes as well as specialized and regional accreditation. What kinds of data summaries are necessary at what levels of institutional function? Individual student, course, program, units, institutional levels?
   - Reporting formats – PDF, Excel, Word, ability to publish to web? Quality of reports?
   - Assessment-related processes and workflows and the workflows into which assessment results will be integrated. For example, will it support periodic/program review as well as annual assessment? Will assessment results be integrated into the budgeting process? Does it need to support a peer review feedback loop or have collaborative workspaces?
   - Calendar and reminder function?
   - Curriculum mapping? E-portfolios? Strategic planning?
   - Other specialty functions?

2. How closely does the system mirror emerging or extant assessment practices on campus? How will it enable continued development?

   Potential considerations:
   - Customizability of the system. Ability to map extant assessment planning and reporting templates/forms and campus-vocabulary into the system or ability to create custom forms and templates to meet these needs. Can it support ad-hoc or customized reports, if desired?
   - Ability to adjust functionality on a program/unit basis to allow for different levels of use or different degrees of familiarity and comfort with assessment across campus.
   - Ability to support multiple user roles and adjust user interface accordingly to keep it easy to use.

3. What is the relationship to extant (or planned) information systems and other assessment-related tools?

   Potential considerations:
   - What information systems on campus contain data that might be important to import? To what information systems might one want to export data? Can the vendor support this? Or will information be moved manually among systems by manually entering data or uploading files, etc.?
For example, the ability to import data from student/people information systems could simplify disaggregation of student learning results by student demographics in course embedded assessment. Beyond people information systems, potential sources of relevant data include course management systems, faculty activity systems, and course evaluation systems.

- Consider also other assessment-related software the campus might use like e-portfolios, survey software, syllabi databases, curriculum mapping software, etc.
- Will the campus be duplicating functions in some cases? Is that ok? Will use priorities need to be established?

4. **Who will use it? Will it be easy and attractive to use and learn to use?**

Potential considerations:

- User friendliness is paramount. Is it intuitive to users? Can it be learned quickly by the most important users on campus? Be sure to consider the least sophisticated user.
- Do different users have different expectations or vocabularies and can the system accommodate this so the learning curve is short and relatively flat?

5. **What institutional resources are available to support purchasing, implementing, troubleshooting, upgrading, maintaining and backing-up the system and to support users?**

Potential considerations:

- Both commercial and home grown systems cost something, whether it be a subscription or the salaries of programmers and the associated hardware, etc. Consider the initial and annual costs of the system and what kind of support comes with the subscription. Some commercial systems are paid for by student subscriptions, some institutional subscriptions.
- If commercial, would you locally host or vendor host the system? What capacity does the institution have to locally host? How does this affect cost?
- What kind of technical support does the vendor provide? How responsive is it?
- What kind of user assistance does the vendor provide? How helpful and responsive is it? When can it be accessed and by whom? What is the response time?
- Does your institution have sufficient professional development support for the faculty and staff implementing assessment? Some vendors employ consultants who will provide assessment-related professional development for faculty and staff. This service may or may not be included in the cost of the package or annual subscription fee.
- If the system is vendor hosted, what does the vendor manage for the institution? What does the institution manage itself? For example, can the institution add or remove users? What control does it have over the structure of the data base and templates?
- Who owns the data if vendor hosted? Should the vendor be sold or closed, or your institution must cancel its account, what happens to your data? What format is it in?
- Data security and back-up. Encryption of data during movement and security of data in database.
Solution Evaluation Matrix
(Circle the appropriate answers below)

<table>
<thead>
<tr>
<th>Solution For: EPortfolio Product Evaluation</th>
<th>Product:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>High (5)</th>
<th>High-Med (4)</th>
<th>Medium (3)</th>
<th>Med-Low (2)</th>
<th>Low (1)</th>
<th>N/A (0)</th>
<th>Solution Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meets Business Requirements</td>
<td>Meets Needs</td>
<td>Acceptable with compromise</td>
<td>Requires Compromise</td>
<td>Compromise and Work</td>
<td>Requires Heavy Work</td>
<td>--</td>
<td>SCORE</td>
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<tr>
<td>Weight: 5 4 3 2 1</td>
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<tr>
<td>Functionality Match Weight: 5 4 3 2 1</td>
<td>Meets Needs</td>
<td>Acceptable with compromise</td>
<td>Requires Compromise</td>
<td>Compromise and Work</td>
<td>Requires Heavy Work</td>
<td>--</td>
<td>SCORE</td>
</tr>
<tr>
<td>Base Feature Match Weight: 5 4 3 2 1</td>
<td>Meets Needs</td>
<td>Acceptable with compromise</td>
<td>Requires Compromise</td>
<td>Compromise and Work</td>
<td>Requires Heavy Work</td>
<td>--</td>
<td>SCORE</td>
</tr>
<tr>
<td>Advanced Feature Match Weight: 5 4 3 2 1</td>
<td>Meets Needs</td>
<td>Acceptable with compromise</td>
<td>Requires Compromise</td>
<td>Compromise and Work</td>
<td>Requires Heavy Work</td>
<td>--</td>
<td>SCORE</td>
</tr>
<tr>
<td>Value Add to Business Weight: 5 4 3 2 1</td>
<td>Meets Needs</td>
<td>Acceptable with compromise</td>
<td>Requires Compromise</td>
<td>Compromise and Work</td>
<td>Requires Heavy Work</td>
<td>--</td>
<td>SCORE</td>
</tr>
<tr>
<td>Reporting Ability Weight: 5 4 3 2 1</td>
<td>Meets Needs</td>
<td>Acceptable with compromise</td>
<td>Requires Compromise</td>
<td>Compromise and Work</td>
<td>Requires Heavy Work</td>
<td>--</td>
<td>SCORE</td>
</tr>
<tr>
<td>Secure Solution Weight: 5 4 3 2 1</td>
<td>Meets Needs</td>
<td>Acceptable with compromise</td>
<td>Requires Compromise</td>
<td>Compromise and Work</td>
<td>Requires Heavy Work</td>
<td>--</td>
<td>SCORE</td>
</tr>
</tbody>
</table>

Laurie Dodge, PhD, Brandman University.  *Identifying Technological Solutions to Advance Institutional Assessment Practices*, WASC ALA, August 2013
| Support Provided | Meets Needs | Acceptable with compromise | Requires Compromise | Compromise and Work | Requires Heavy Work | 5 | 4 | 3 | 2 | 1 | SCORE |
|------------------|-------------|-----------------------------|---------------------|--------------------|---------------------|-------------------|
| Weight:          |             |                             |                     |                    |                     | 5 | 4 | 3 | 2 | 1 |               |

| Deployment Flexibility | Meets Needs | Acceptable with compromise | Requires Compromise | Compromise and Work | Requires Heavy Work | 5 | 4 | 3 | 2 | 1 | SCORE |
|------------------------|-------------|-----------------------------|---------------------|--------------------|---------------------|-------------------|
| Weight:                |             |                             |                     |                    |                     | 5 | 4 | 3 | 2 | 1 |               |

| Access to Data | Meets Needs | Acceptable with compromise | Requires Compromise | Compromise and Work | Requires Heavy Work | 5 | 4 | 3 | 2 | 1 | SCORE |
|----------------|-------------|-----------------------------|---------------------|--------------------|---------------------|-------------------|
| Weight:        |             |                             |                     |                    |                     | 5 | 4 | 3 | 2 | 1 |               |

| Ability to Customize | Meets Needs | Acceptable with compromise | Requires Compromise | Compromise and Work | Requires Heavy Work | 5 | 4 | 3 | 2 | 1 | SCORE |
|----------------------|-------------|-----------------------------|---------------------|--------------------|---------------------|-------------------|
| Weight:              |             |                             |                     |                    |                     | 5 | 4 | 3 | 2 | 1 |               |

| Ability to Integrate | Meets Needs | Acceptable with compromise | Requires Compromise | Compromise and Work | Requires Heavy Work | 5 | 4 | 3 | 2 | 1 | SCORE |
|----------------------|-------------|-----------------------------|---------------------|--------------------|---------------------|-------------------|
| Weight:              |             |                             |                     |                    |                     | 5 | 4 | 3 | 2 | 1 |               |

<table>
<thead>
<tr>
<th>Solution Points (Weight * Points)</th>
<th>SCORE</th>
<th>SCORE</th>
<th>SCORE</th>
<th>SCORE</th>
<th>SCORE</th>
<th>TOTAL</th>
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</tr>
</tbody>
</table>

Weight Meanings:

5 = Extremely Important / Deal Breaker / (Requires Heavy Work) Without
4 = Very Important / (Requires Compromise and Work) Without
3 = Highly Important / (Requires Compromise) Without
2 = Important / (Acceptable with Compromise) Without
1 = Normal Importance / (Acceptable) Without

Laurie Dodge, PhD, Brandman University.  *Identifying Technological Solutions to Advance Institutional Assessment Practices*, WASC ALA, August 2013
## Solution Matrix Details

### Solution For: EPortfolio Product Evaluation

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meets Business Requirements</strong></td>
<td>Will this product meet the needs expressed by the schools at Brandman University? Does this solution meet the pedagogical requirements of the University?</td>
</tr>
<tr>
<td><strong>Functionality Match</strong></td>
<td>Does this EPortfolio solution require use of assessment or can these be used separately?</td>
</tr>
<tr>
<td><strong>Base Feature Match</strong></td>
<td>Is this product able to meet our expectations regarding features available, including media compatibility, video streaming, mobile device access, storage/growth availability, and are they PC/Mac compatible?</td>
</tr>
<tr>
<td><strong>Advanced Feature Match</strong></td>
<td>Are long-term tracking options available?</td>
</tr>
<tr>
<td><strong>Value Add to Business</strong></td>
<td>Does the value of the product justify the additional expense to purchase the product? Is the cost level higher than the level of value provided?</td>
</tr>
<tr>
<td><strong>Reporting Ability</strong></td>
<td>Are we able to take information from course portfolios administratively and produce necessary reports to gather WASC requirements and internally meet reporting needs?</td>
</tr>
<tr>
<td><strong>Secure Solution</strong></td>
<td>Is data transmission secured? Does this solution meet our requirements regarding the security of the information stored?</td>
</tr>
<tr>
<td><strong>Support Services</strong></td>
<td>How available is support for the needs identified by Brandman University? Is support available without additional costs being involved?</td>
</tr>
<tr>
<td><strong>Deployment Flexibility</strong></td>
<td>Is the solution scalable? Can we start off small and grow into the need we see as appropriate for our user base? What is their business model for growth?</td>
</tr>
<tr>
<td><strong>Access to Data</strong></td>
<td>Can portfolios be exported by the student for use elsewhere? Can aggregate data be collected at an administrative level across multiple portfolios?</td>
</tr>
<tr>
<td><strong>Ability to Customize</strong></td>
<td>Can changes be made relatively easily? What would the process involve if we needed something changed? What would the costs be?</td>
</tr>
<tr>
<td><strong>Ability to Integrate</strong></td>
<td>Is Single Sign on provided? What level of integration does the product provide for our other systems (Blackboard, MyWindow, etc.)?</td>
</tr>
</tbody>
</table>
Overarching priorities:
The university is pursuing an enterprise assessment management system to support the ongoing development of a culture of assessment focused on improving student learning and success. As such the application must support the assessment philosophies and activities of the campus's three main divisions – academic, student affairs and administration- while making assessment results accessible and useful to the campus in support of planning and decision making, including program/periodic review and institutional-level assessment. The specific functions needed to meet this priority are described below.

<table>
<thead>
<tr>
<th>Priority (High, Medium, Low)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Intuitive and user friendly for faculty and staff, and frequent and infrequent users.</td>
</tr>
<tr>
<td>Logically organized workflow in keeping with campus assessment methodologies and philosophy</td>
</tr>
<tr>
<td>Facilitate use by infrequent users with limited knowledge of the structure of the system</td>
</tr>
<tr>
<td>Limit the number of clicks necessary to accomplish tasks</td>
</tr>
</tbody>
</table>

2) Customizable to Support Diverse Assessment Activities and Practices
   A) Institutional Hierarchy
   - Database can be structured to reflect institutional organization in relation to shared goals/outcomes, not just administrative relationships
   - Can easily accommodate changes in the hierarchy without the loss of data or the need to reenter data
   - Local/institutional control of hierarchy

   B) Annual Assessment Planning, Data Collection, and Reporting
   - Enable local campus vocabulary, including differences in vocabulary among academic, student affairs, and administrative units
   - Replicate extant and distinct assessment planning and reporting methodologies and workflow for academic, student affairs, and administrative units, including annual and multi-year assessment planning
   - Enable/disable functions on unit by unit basis to support variation in the kinds of tools or applications required (ex. course-embedded vs program level assessment reporting only)
   - Support multiple lines of evidence/measures/metrics per a single outcome/objective
   - Plan assessment by assigning particular outcomes or metrics for review in particular years
   - Assign particular responsibilities to specific individuals, for example, responsibility for gathering a specific data set
   - At any level (course, program or unit), and as part of the natural workflow, report annual assessment conclusions and identify actions that reflect the collective evaluation of multiple lines of evidence, as opposed to being limited to identifying conclusions and actions for each individual measure/line of evidence only
   - Support curriculum mapping with program specific terminology
   - Enable users to see available assessment tools (ex. rubrics) & data campus-wide
   - Enable juried assessment, either paper or digital, with easy upload of digital work in bulk
   - Calculate and report inter-rater reliability for jurried assessments
   - Summarize rubric results as frequencies (not just averages), including results for the individual criteria composing analytic rubrics
   - Enable asynchronous faculty discussion of assessment plans, reports, and proposed actions and ability to document as desired.
   - Graphical representation of assessment results within application, rather than in appended documents
   - Support Deans /VC Responses to annual assessment and program/periodic review
   - Archive examples of student work, rubrics, etc. in diverse file formats (video, urls, audio, etc.) and associate directly with relevant measures/metrics

   C) Program/Periodic Review
   - Replicate extant and distinct program/periodic review self-study structures for academic, student affairs and administrative units
   - Support drafting of program review self-study and review by program faculty
   - Share self study and associated evidence with reviewers external to the program and to the university, possibly best as a password protected URL
   - Accommodate program review reports written by review committee
   - Support administrative and faculty to responses to program review report

3) E-Portfolios
   - Associated, integrated e-portfolio function, with portfolio results directly shared with AMS, not imported as a report
   - Asset/artifact (ex. student work) storage?
   - Student access to portfolios after graduation or ability to take portfolio with them in usable form
Overarching priorities:
The university is pursuing an enterprise assessment management system to support the ongoing development of a culture of assessment focused on improving student learning and success. As such the application must support the assessment philosophies and activities of the campus’s three main divisions – academic, student affairs and administration- while making assessment results accessible and useful to the campus in support of planning and decision making, including program/periodic review and institutional-level assessment. The specific functions needed to meet this priority are described below.

<table>
<thead>
<tr>
<th>Priority (High, Medium, Low)</th>
<th>4) Customizable Reporting Functions</th>
<th>5) Assessment &amp; Program/periodic review management</th>
<th>6) Role-based User Access</th>
<th>7) Interface with other campus Information Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A) Reporting Functions</td>
<td></td>
<td></td>
<td>A) Data from other systems (ex. ODS, Banner)</td>
</tr>
<tr>
<td></td>
<td>Provide a “dashboard view” of assessment activities, progress, and other program/units stats etc.</td>
<td></td>
<td></td>
<td>Student demographic data including retention, graduation, etc.</td>
</tr>
<tr>
<td></td>
<td>Run reports that summarize/aggregate assessment practices, results, etc. across units in relation to shared, overarching goals/outcomes/objectives</td>
<td></td>
<td></td>
<td>UCUES/NSSE results, ex. program level</td>
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<tr>
<td></td>
<td>Run ad-hoc reports/develop custom reports accessing information in any data base field</td>
<td></td>
<td></td>
<td>Course evaluation data</td>
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<tr>
<td></td>
<td>Generate reports aligned to WASC Standards</td>
<td></td>
<td></td>
<td>B) Export data to other systems (ex. ODS)</td>
</tr>
<tr>
<td></td>
<td>Generate reports aligned to standards of specialized accreditors (ex. ABET)</td>
<td></td>
<td></td>
<td>Annual reports submission rates (program/unit)</td>
</tr>
<tr>
<td></td>
<td>Manipulate layout and organization of reports produced by the application (as opposed to exporting report contents to Excel to manipulate)</td>
<td></td>
<td></td>
<td>Program/periodic review completion rates</td>
</tr>
<tr>
<td></td>
<td>B) Publishing/exporting reports</td>
<td></td>
<td></td>
<td>B) Security</td>
</tr>
<tr>
<td></td>
<td>Export reports to Excel to permit additional manipulation of data/information</td>
<td></td>
<td></td>
<td>Basic confidentiality standards (e.g. FERPA)</td>
</tr>
<tr>
<td></td>
<td>Publish to PDFs</td>
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<td></td>
<td>Single sign-on</td>
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<tr>
<td></td>
<td>Share reports for feedback/input from colleagues and document comments within the system</td>
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<td></td>
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<tr>
<td></td>
<td>Publish reports directly to Web</td>
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<td></td>
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Laura E. Martin, PhD., University of California, Merced. Identifying Technological Solutions to Advance Institutional Assessment Practices, WASC ALA, August 2013
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<thead>
<tr>
<th>Priority (High, Medium, Low)</th>
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<tbody>
<tr>
<td>11) Hosting &amp; Vendor Support</td>
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<tr>
<td>Locally Hosted</td>
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<tr>
<td>Vendor Hosted</td>
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<tr>
<td>High quality vendor support, responsive to institutional needs</td>
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* Some vendors do not support direct database access and so cannot query at will, rather have to use reporting forms developed by vendor in response to user needs
Example Questions for Institutional Contacts Regarding their Experiences with Assessment Management System:

1) What was the primary reason your institution selected X? / What was needs did X meet/what were you trying to achieve?

2) Who is using X on your campus? (faculty / administration / student affairs/other departments e.g. library) How long has your institution been using it?

3) How easy was it to get it up and running?

4) To what extent have you customized the system? How easy is this to do? (Can it be done easily in-house? e.g. timeline, cost)

5) How easy is the system to use? (inputting data, tracking data, pulling reports)

6) Is there any difference in user satisfaction between user groups, e.g. faculty, administrators, and student affairs staff, etc.?

7) Is it connected to other systems on campus such as a course management system? How easy was this to do?

8) What was the initial cost? What is the ongoing cost? (e.g. people, expertise) Do you consider it good value for cost?

9) Was there anything that surprised you about the system good or bad?

10) Would you buy it again? (If not, what would you buy instead?)

11) What type of service and support are included in the price? How does the support operate? Does it meet your needs?
Example Vendor Script for On-Campus Demonstration

I. Academic Assessment: Demonstrate system use for academic assessment.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Proposed Attendees</th>
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<td>Academic Senate</td>
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<td>Academic Senate Office</td>
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<tr>
<td>Institutional Research</td>
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<td>IT</td>
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<tr>
<td>Teaching and Learning Center</td>
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<td>Council on Assessment</td>
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<tr>
<td>School of X</td>
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<tr>
<td>School of Y</td>
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<tr>
<td>School of Z</td>
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</tbody>
</table>

Demonstrate or discuss with us:
1) Faculty Assessment Organizer and faculty colleague view of annual assessment planning and reporting and associated workflow.
   - Capacity for multiyear assessment planning and curriculum mapping from course to program to institutional outcomes and mission and strategic planning.
   - Representation of results like those gathered from rubrics, as graphs or tables summarizing frequencies or means. How would longitudinal data be represented?
   - Capacity for archiving examples of student work (including diverse file formats), and associated rubric(s).
   - Discuss potential models for addressing the relationship between the AMS and Sakai, our CMS/LMS, and the need to store large numbers of artifacts to be reviewed at some future date.
   - As relevant, share the student view and describe how students interact with the system.
   - Capacity for supporting online assessment – rubric scoring, data aggregation and analysis.
   - Capacity for varying available tools and functions on a program by program basis, consistent with assessment practices and needs.
   - Ability to link individual users to particular tasks
   - Capacity to enable asynchronous faculty discussion of assessment plans, reports, and proposed actions and ability to document as desired.
   - Capacity for providing and documenting rubric-based and narrative feedback to programs on assessment practices.

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2) School or higher level administrative views of programmatic annual assessment planning and reporting and associated workflow, including the ability to
   • Track stage of individual program planning and reporting.
   • Provide automatic reminders, with varied submission deadlines among programs.
   • Comment on reports, for example, to document priority for budget requests.
   • Extract reports, for example, documenting assessment results, budget priorities, program assessment status for inclusion in budget requests or to link to these results in budget requests.

3) An example of periodic program review. Illustrate the ability to
   • Collaboratively develop self-study in AMS with links to supporting evidence, including annual assessment materials.
   • Vary program document access both for on and off-campus stakeholders with program review workflow. For example, academic program review files are confidential until the reviews are closed and some of those files (e.g. review team reports) are used to implement an action plan. How can the product support this? Who manages access and how? How can the system support review of the program self-study by members of an external review team?
   • Document administrator and program responses to the review. How can the system enable and document program and administrator responses to the reports, and resulting action plans?

4) Report generation and example reports. Illustrate the ability to
   • Generate reports, including ad-hoc reports, on assessment reporting fields (methods, results, conclusions, actions, and associated examples of student work), across years within a program, across programs within a school or across the institution, in relation to strategic plans, in relation to institutional goals, for example general education outcomes across programs, and in relation to WASC Standards or expectations of specialized accreditors (ex. ABET).
   • Generate assessment-related statistics, like number of programs with completed reports, types of evidence used, etc.
   • Export AMS data to Excel or as a CSV file for analysis or refinement of reports elements.
   • Publish select assessment-related information to web, for example, on program by program basis or summary statistics.

5) Describe user training and support.

6) Describe customizability of system.

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III. **E-portfolio system:** Demonstrate E-portfolio system.

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<td>School of Z</td>
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<tr>
<td>Division of Student Affairs</td>
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**Show or share with us:**

1) **Guidance for portfolio development**
   - Can a portfolio be structured around outcomes/standards? In our current system, we use a matrix that maps assignments to Program Learning Outcomes as a way to guide students through constructing a portfolio.

2) **Assessment/Feedback**
   - What tools are available for providing formative and summative feedback?
   - Who can provide feedback (e.g., formative feedback from teacher to students; students to students; staff to students, etc.)?
   - How is feedback displayed and archived?

3) **Ownership/Access/Sharing**
   - Who owns the portfolio (e.g., teachers, students, vendor)?
   - Where are the data stored?
   - Can content be downloaded at anytime?
   - Do students have to share a portfolio before a teacher can view it?
   - Are there administrative overrides to access student portfolios?
   - Can portfolios be shared with anyone? If so, how?
   - Can students retain ownership and use of e-portfolio after graduation? If so, how?

4) **Integration/Interoperability**
   - Can the system integrate with Sakai, especially draw resources from it? If not, can the system integrate with banner?
   - Can students download their portfolio and upload it to another portfolio system?
5) Features
   • Can portfolios include various types of digital content, including documents, images, and videos?
   • Is there a social networking component (e.g., can students connect their portfolio to Facebook, Twitter, etc.)?
   • Can a portfolio be viewed and/or created on a mobile tool?

6) Aggregating Data/Reporting
   • What types of reporting are available at the instructor, program, and institution levels?
   • Is there a dashboard for viewing individual and aggregate progress towards a particular standard/outcome?

7) Training and support
   • What kinds of training and support are available for students, faculty and staff?
   • Do you have online training resources for faculty and students?
   • How are software problems prioritized and resolved?

8) Customization
   • How customizable is the software?
   • What’s the process involved for adding/amending a particular function or feature?

9) Illustrate how the E-portfolio system integrates with the AMS to enable assessment at the course, program or institutional levels.
IV. Information Technology: Separate meeting to discuss IT specific issues

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</tbody>
</table>

Show or discuss with us:

1) Ability to interface with key transactional systems
   a. Sakai, UC Merced’s course management system
   b. Operational Data Store
   c. Banner
   d. ECMS (UC Merced will be adopting a new Enterprise Content Management System)
   e. Digital Measures
2) Hosting models and influence on
   a. Degree of local control of data and software functions
   b. Security
   c. Integration with key transactional systems
   d. Cost
3) Who manages user access?
4) System back-up and recovery, if vendor hosted
5) Data ownership and data access if company fails?
6) For what OS is the software available?
7) How do we seed courses into the system?
8) How do we seed our users into the system?
9) What is the security model? Can we use CAS or SHIB?
10) How do we pull data out?
11) How are the data stored? Are there any standards in this field?
12) What is the amount of time needed to implement the AMS?
13) What types of people do we need on our end to implement?
14) If we need customizations done, what is the cost/time to implement?
15) Do you have a professional services group?
16) Discuss pricing/cost models.
Example Faculty and Staff Feedback Form for Assessment Management Software Demonstrations

Vendor: __________

Session: Administrative Assessment or Academic Assessment. (Please circle one.)

1) Your name: __________________________

2) Briefly describe your responsibilities for annual assessment.

3) Please reflect on your annual and periodic (eg. program review) assessment-related responsibilities.
   a) What are some key strengths of this software in helping you to meet these responsibilities?
   b) What are some weaknesses of this software in relation to meeting these responsibilities?
   c) Are there additional features you would like but that weren’t described?
   d) How easy do you think this system would be to use? (Please circle one.)
      
      Very easy    Somewhat easy    Somewhat difficult    Very difficult

4) Additional Comments:

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**Example Survey for Participants in Assessment Management Software Demonstrations**

1) How many [academic assessment]\(^1\) demonstrations did you attend?

2) Which [academic assessment vendor] demonstrations did you attend?

3) For the [academic assessment] systems you observed, please rank your preference.

4) How strong is your preference for your top ranked [academic assessment] management software? [Choices: very weak, weak, strong, very strong]

5) Please share your observations, thoughts, or advice below. [open ended]

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\(^{1}\) The institution conducted demonstrations specific to academic assessment, administrative assessment (including Student Affairs), and e-portfolios. The same questions were repeated for each of these three demonstration sessions. A “0” response automatically directed the respondent to the next set of questions, which addressed a different session.

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References

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